CLAIMS

1   1.   A recombinant polynucleotide encoding a fusion protein comprising the
2   variable region of the light chain of a selected antibody linked to the variable region of the heavy
3   chain of the selected antibody, the signaling domain of human CD28 receptor and a
4   transmembrane domain.

1   2.   The recombinant polynucleotide of claim 1, wherein the transmembrane
2   domain is the human CD28 transmembrane domain.

1   3.   The recombinant polynucleotide of claim 1, wherein the selected antibody
2   is an anti-G_{D2} antibody.

1   4.   The recombinant polynucleotide of claim 3, further comprising a~~region~~
2   ~~encoding~~ a suicide gene.

1   5.   The recombinant polynucleotide of claim 4, wherein the suicide gene
2   encodes thymidine kinase.

1   6.   The recombinant polynucleotide of claim 1, further comprising a~~region~~
2   ~~encoding~~ a suicide gene.

1   7.   The recombinant polynucleotide of claim 6, wherein the suicide gene
2   encodes thymidine kinase.

1   8.   A recombinant peptide comprising the variable region of the light chain of a

2   selected antibody linked to the variable region of the selected antibody, the signaling domain of

3   the human CD28 receptor and a transmembrane domain.

1   9.   The recombinant peptide of claim 8, wherein the transmembrane domain to

2   the human CD28 transmembrane domain.

1   10.   The peptide according to claim 9, wherein the selected antibody is an anti-

2   G_{D2} antibody.

1   11.   T cells expressing a recombinant peptide comprising the variable region of

2   the light chain of selected antibody linked to the variable region of the heavy chain of the selected

3   antibody and to the signaling domain of the human CD28 receptor and a transmembrane domain.

1   12.   T cells of claim 11, wherein the transmembrane domain to the human

2   CD28 transmembrane domain.

1   13.   T cells according to claim 11, wherein the selected antibody is an anti-G_{D2}

2   antibody.

1   14.   T cells according to claim 13, wherein the T cells further express a suicide

2   gene.

1   15.   T cells according to claim 14, wherein the suicide gene encodes thymidine

2   kinase.

1   16.   A method for inducing in a host an immune response to tumor cells

2   expressing a surface antigen comprising the steps of

3   (a)   transducing T cells to introduce an expressible recombinant polynucleotide

4   encoding a fusion protein comprising the variable region of the light chain of an antibody against

5   the surface antigen, linked to variable region of the heavy chain of an antibody against the surface

6   antigen, the signaling domain of human CD28 receptor and a transmembrane domain; and

7   (b)   introducing transduced T cells expressing the recombinant polynucleotide

8   into the host.

1   17.   The method according to claim 16, wherein the transmembrane domain to

2   the human CD28 transmembrane domain.

1   18.   The method of claim 16, wherein the tumor cells express G_{D2} as a surface

2   antigen, and wherein the fusion protein includes the light chain and the heavy chain of an antibody

3   against G_{D2}.

1   19.   The method according to claim 18, wherein the expressible polynucleotide

2   further encodes a suicide gene.

1   20.   The method according to claim 19, wherein the expressible polynucleotide

2   further encodes a suicide gene.